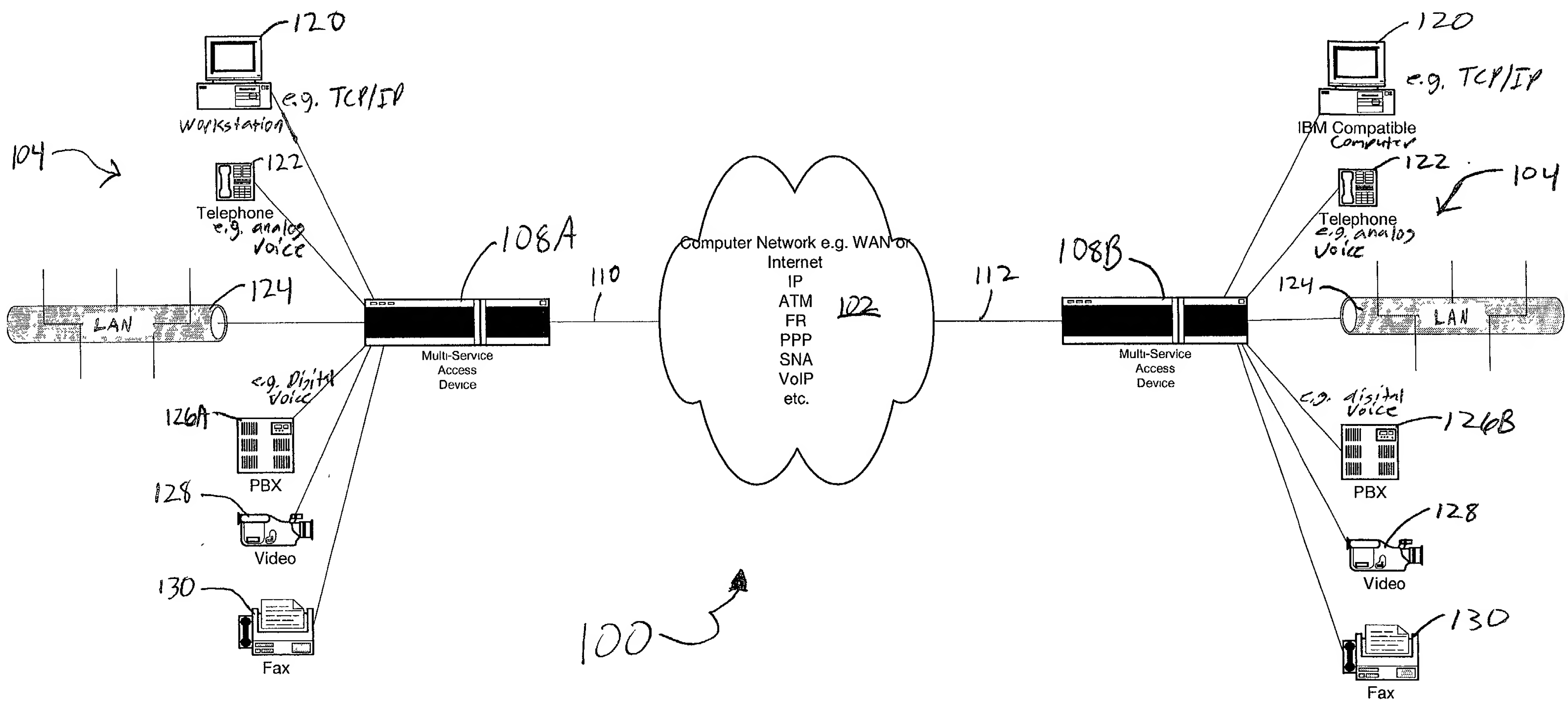
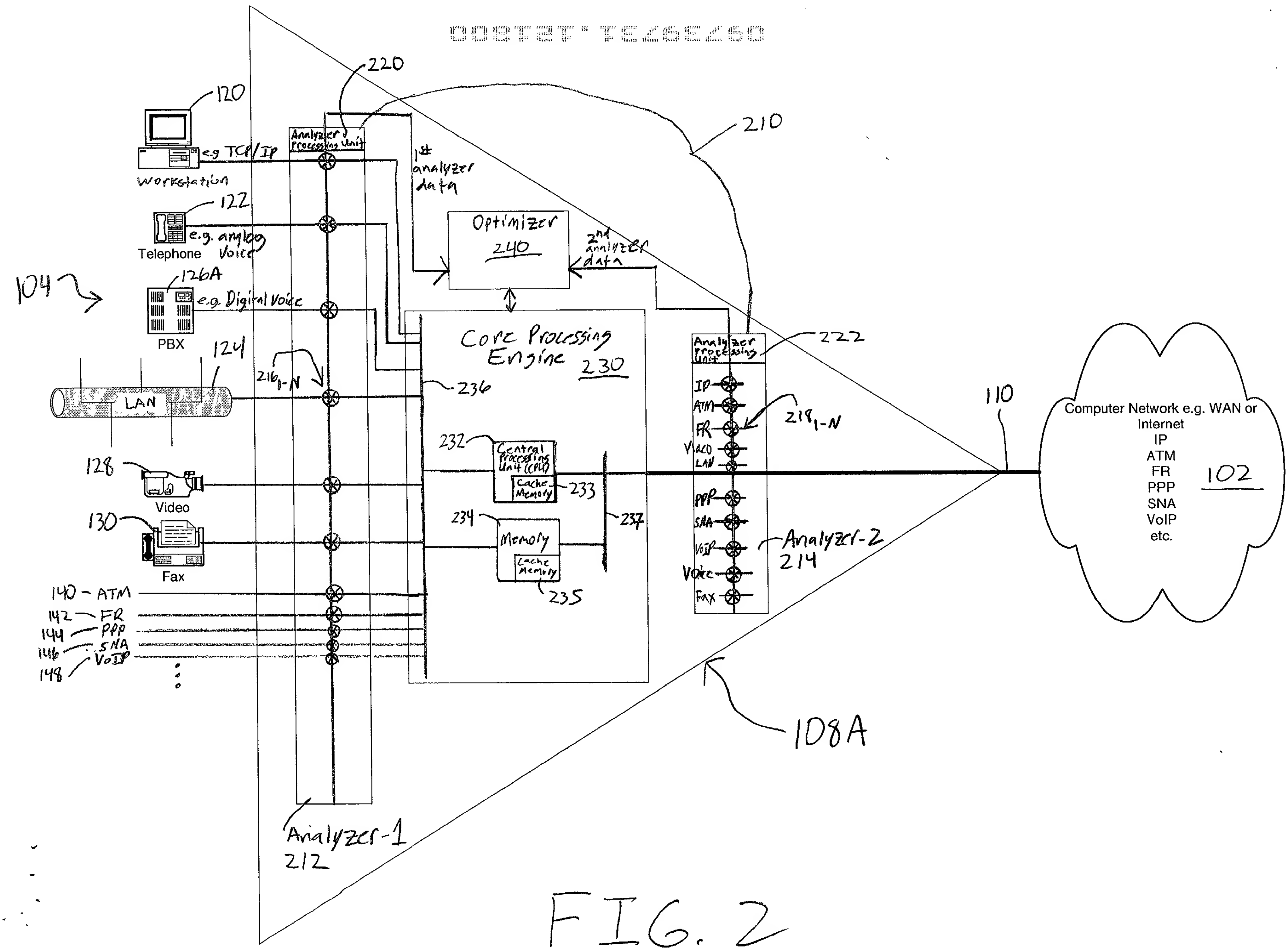

120
e.g. TCP/IP
Workstation
104
122
Telephone
e.g. analog voice
124
LAN
108A
110
Multi-Service Access Device
e.g. Digital voice
126A
PBX
128
Video
130
Fax
Computer Network e.g. WAN or
Internet
IP
ATM
FR
PPP
SNA
VoIP
etc.
102
100
112
108B
Multi-Service Access Device
120
e.g. TCP/IP
IBM Compatible Computer
122
104
Telephone
e.g. analog voice
124
LAN
e.g. digital voice
126B
PBX
128
Video
130
Fax

FIG. 1



220
120
Analyzer Processing Unit
e.g TCP/IP
Workstation
1st analyzer data
210
122
Optimizer 240
e.g. analog Voice
Telephone
2nd analyzer data
104
126A
e.g. Digital Voice
PBX
Core Processing Engine 230
Analyzer Processing Unit
222
124
216 1-N
LAN
236
IP
ATM
FR
Video
LAN
218 1-N
110
Computer Network e.g. WAN or Internet
IP
ATM
FR
PPP
SNA
VoIP
etc.
102
232
Central Processing Unit (CPU)
Cache Memory
233
128
Video
PPP
SNA
VoIP
Voice
Fax
130
234
Memory
Cache Memory
237
Analyzer-2 214
Fax
235
140 ATM
142 FR
144 PPP
146 SNA
148 VoIP
108A
Analyzer-1 212

FIG. 2

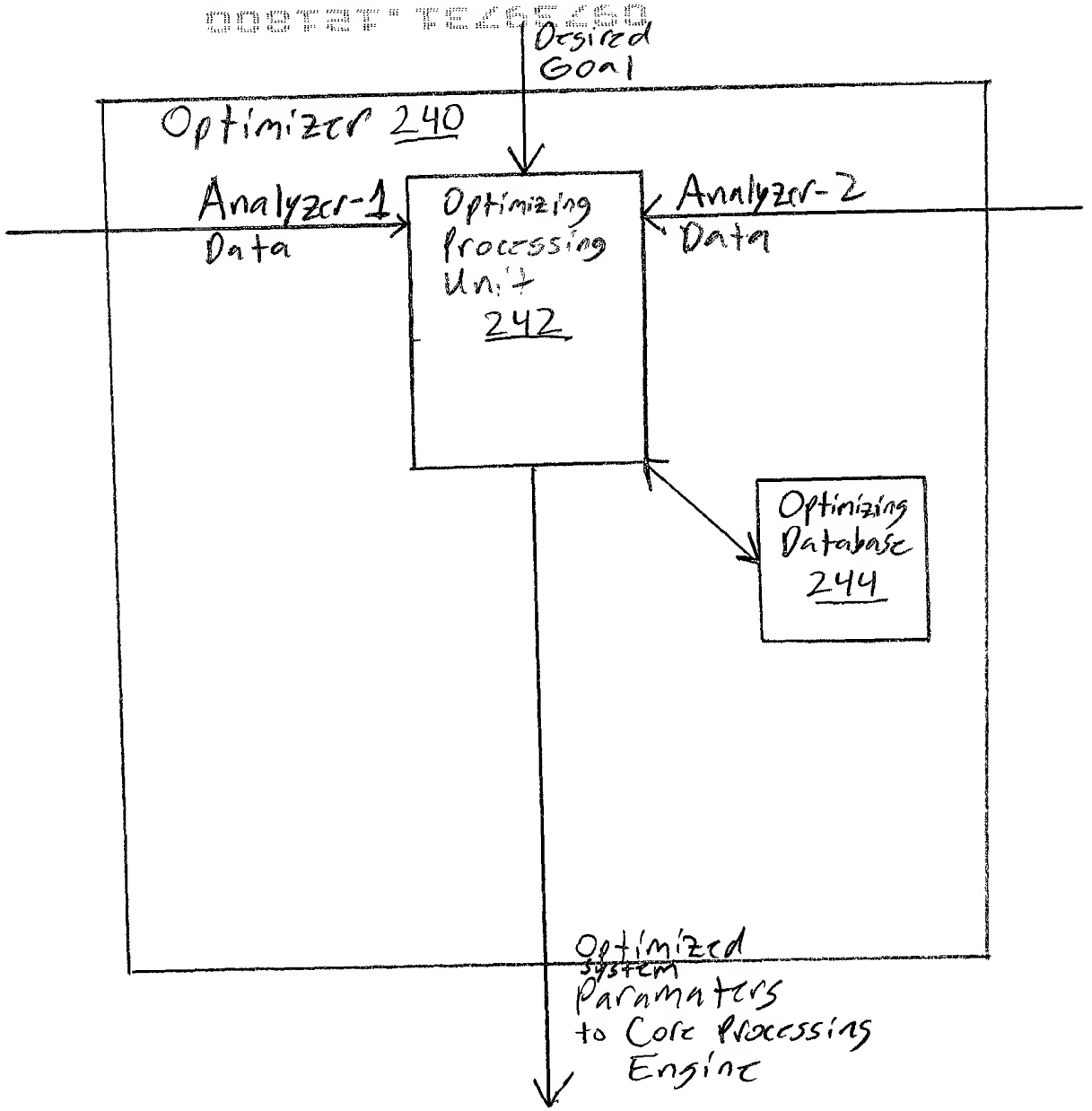

Desired Goal
Optimizer 240
Analyzer-1 Data
Optimizing Processing Unit 242
Analyzer-2 Data
Optimizing Database 244
Optimized System Paramaters to Core Processing Engine

FIG. 3

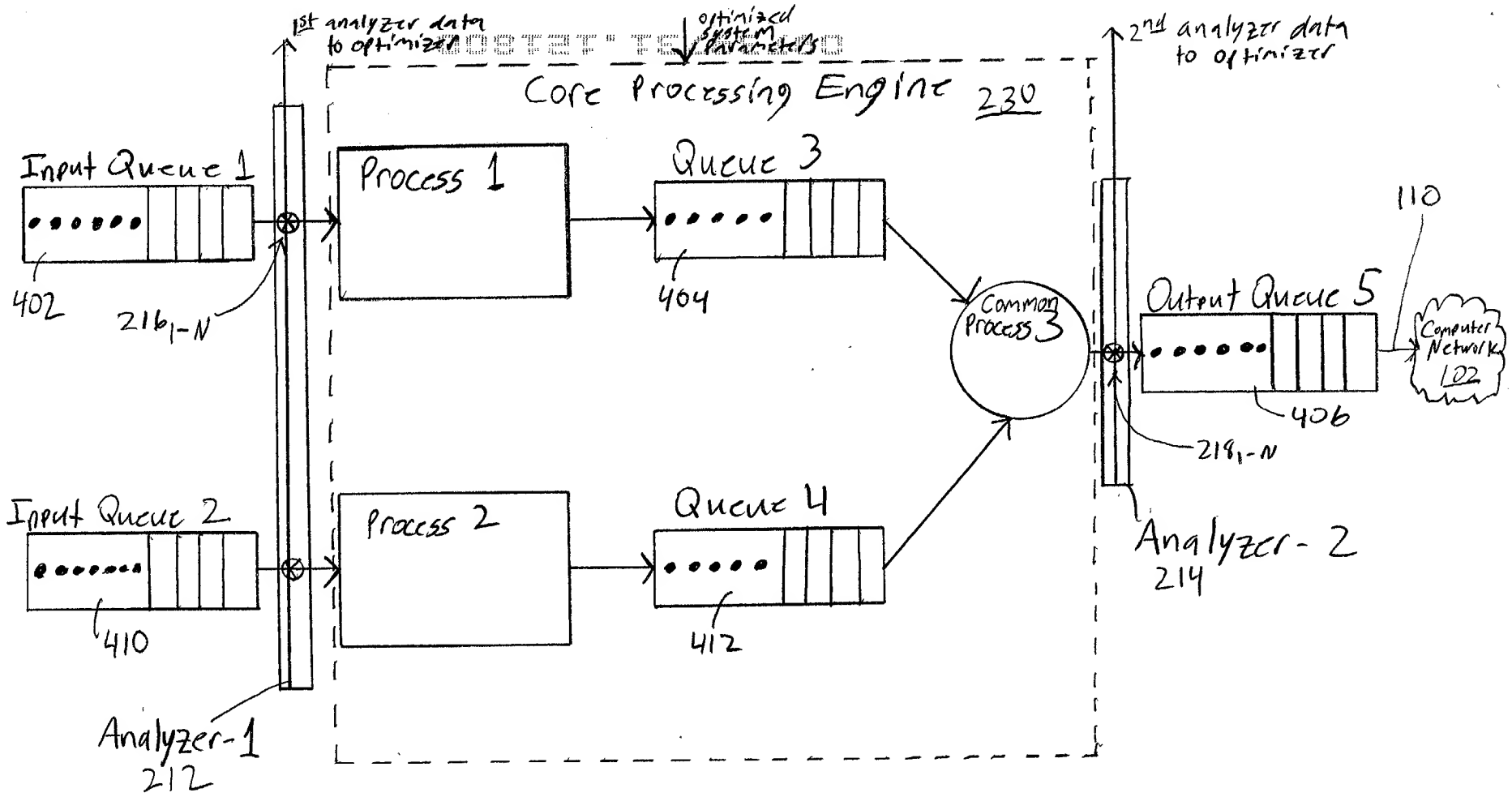

1st analyzer data to optimizer
optimized system parameters
2nd analyzer data to optimizer
Core Processing Engine 230
Input Queue 1
Process 1
Queue 3
402
216_{1-N}
404
Common Process 3
Output Queue 5
110
Computer Network 102
406
218_{1-N}
Input Queue 2
Process 2
Queue 4
Analyzer-2 214
410
412
Analyzer-1 212

FIG. 4

	Goal	Queue 1	Process 1	Queue 3	Process 3	Queue 5	Queue 2	Process 2	Queue 4
Row 1	Queue 1 = Voice (High Priority) Queue 2 = Financial Data via SNA (Low Priority)	Queue = Small	High Scheduling Priority Large CPU allocation Large Cache allocation	Queue = Small	High Scheduling Priority Favor Queue 3 Large CPU allocation Large Cache allocation If congestion, Discard Queue 4	Queue = Small	Queue = Large	Low Scheduling Priority Small CPU allocation Small Cache allocation	Queue = Large
Row 2	Queue 2 = Financial Data via SNA (High Priority) Queue 4 = Interact traffic via ? (Low Priority)	Queue = Large	Low Scheduling Priority Small CPU allocation Small Cache allocation	Queue = Large	High Scheduling Priority Favor Queue 4 Large CPU allocation Large Cache allocation If congestion, Discard Other Queue	Queue = Large	Queue = Large	High Scheduling Priority Large CPU allocation Large Cache allocation	Queue = Large

FIG. 5